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ABSTRACT

This handbook discusses the process of planning school grounds. It presents ideas for creating good educational landscapes and provides step-by-step procedures to achieve this goal. The steps include ground surveying and analysis, establishing community and school needs and wants, planning changes and preparing the design process, publicizing and consulting to get feedback on the proposals, selecting and establishing fundraising sources, implementing the plan and building its momentum, and incorporating maintenance and sustainability features in the planning. A checklist is offered to help planners assess whether the project addresses sustainability principles. Appendices focus on planning play areas. Topics discussed include play equipment, safety, surfacing, topography, and plants. Organizations are listed for additional information and support. (Contains 16 references.) (GR)

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Your School Grounds Handbook

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Why do anything with your school grounds?

Your school grounds are an important asset but are you sure you're getting the maximum return from them? Some schools ignore the potential of their grounds or believe that they are best left alone as long as they are neat and tidy.



But investing a little time, money and imagination could transform your school and have a really positive influence on your pupils.

Unfortunately many schools are set in grounds which are uninviting, featureless and exposed to the elements. Playground supervisors often see the effects of this on pupils at break times: aggressive behaviour, bullying, vandalism, accidental injuries caused by playground collisions and just plain boredom. Teachers will see it when their pupils take the problems of the playground back into the classroom after break.

Research by Learning through Landscapes suggests that an uninteresting environment which is evidently not valued by the school will not be valued by its pupils and a bleak environment may convey the message that the pupils are not valued members of our society.

School grounds **can** be designed to facilitate learning and provide a rich variety of spaces offering different qualities and experiences. Pupils should have the opportunity to join in various forms of active and passive play or just sit in shelter from rain, sun or the prevailing wind to talk.



To get the most out of your grounds you will need to involve the whole school community in the re-planning process. You will need to raise money to pay for the improvements and you will need some willing workers to help implement the various stages of the plan as and when sufficient funds are raised.

This handbook will provide an introduction to the process of re-planning your school grounds, it will give you some ideas for creating good educational landscapes and provide you with a step by step guide to achieve your goals.

Full text available at:

<http://freespace.virgin.net/school.scapes/howto.htm>

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The potential of school grounds

Don't forget that you are going to be creating an environment which balances the need for learning opportunities with the creation of good play and social facilities. It will also be your contribution to the local environment.

It is important then to bear in mind that school grounds can be used to support both the **formal** (teaching), **informal** (social and play) and the **hidden curriculum** (wider issues):

Formal curriculum

In many schools the largest single use of the school grounds is for sports and games. No-one is suggesting that this should change but there will be other areas which could provide opportunities for the formal teaching of other elements of the curriculum.

Informal curriculum

Schools which have provided a range of different play facilities and places for social interaction have noted that, with more positive ways of channelling pupils' energy and aggression, anti-social behaviour is lessened and there are fewer accidents.

Hidden curriculum

Schools which have involved their pupils in the improvement process have noticed a decrease in vandalism resulting from the increased sense of pride and identification with the school which this engenders.

Help is at hand!

If all this seems a very remote possibility for your school don't despair! This handbook will guide you and in the appendices at the end you will find the names of some publications and organisations which will provide advice, practical assistance and, sometimes, even money to help you.

How do we start?

The best way to start changing your grounds is: to have a Plan!

Before you can begin though, you have to decide how you will co-ordinate the process and who else will help carry it through. The best way to ensure that the project maintains its momentum is to form a **Grounds Action Group** who will provide the impetus for the process. It may be useful for them to nominate a co-ordinator to liaise with other organisations and professional consultants. By the way, whilst the Head Teacher will almost always want to be involved, their other commitments mean that they are not always best placed for the role of co-ordinator.

A few things for the Action Group to bear in mind:

- The development of your school grounds will take a long time. Be prepared for a long-term commitment.
- You will be working as a team and have responsibilities to each other as well as to the wider school community.
- Consult and inform all members of the school community as appropriate.
- Determine your priorities at an early stage.
- Monitor progress continually.
- Allocate tasks to individuals and set completion targets.

Your first task is to take a look at how the grounds are used at the moment and to ask yourselves some questions:

- What would you like to be able to use them for that you do not or cannot at the moment?
- What would you like to be different about them?
- Do they provide the setting that you would like for your school?
- Does the entrance give a good first impression to visitors?
- Would you like a formal area for use as an outdoor classroom?
- Is there a need to create sheltered areas in the grounds?



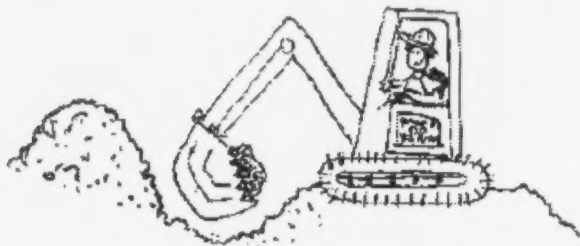
- How important are they environmentally in the context of the surrounding areas?
- How interesting are the opportunities for play?
- Is there a quiet area?
- Is there sufficient seating?
- Is there a litter problem?
- What curricular needs do the grounds fulfil?
- Whose permission will you need to obtain before you can carry out any work?

The step-by-step process

1. Surveying the grounds:

Before you can begin to change your grounds you need to have a record of exactly what is there at the moment.

If you don't already have a large scale plan of your school and its grounds you will need to get hold of one from the local authority education department, planning department or perhaps your maintenance contractor. If none of them can provide you with the sort of plan you need you can buy one from an authorised Ordnance Survey stockist. Get them to print it out at A0 size, probably at 1:200 or 1:250 scale.



This is an ideal opportunity to start to link the development process to the curriculum and you could at this point involve the pupils in carrying out the survey. **Learning through Landscapes** produce the **Esso Schoolwatch, Initial Survey Pack** a guide to surveying your school grounds. However, because this is a fairly critical stage in the process it might be the right time to consider calling in a professional who could produce an

accurate scale diagram of the school grounds in parallel with the school's own form of survey.

Your survey will need to indicate the exact size and position of various features of the grounds such as:

- grass areas and their uses
- tarmacadam areas and their uses
- paved areas and their uses
- trees, shrubs and planted areas
- car parking
- walls and fences
- erosion
- ditches
- formal paths
- informal paths (desire lines)
- location of services*
- slopes
- steps
- wet areas

*Contact Telephone, Gas, Electricity and Water service providers and ask them to let you have a plan showing the location of their pipes and cables so that you can plan the new features around them and do not locate anything over them or damage any of them during digging work for ponds, footings etc.

In addition to recording the physical aspects of your site you can also look into its history. Local archive material can be researched and you can ask local residents about the past uses of the site. The history might later serve as inspiration for some new feature or use for part of the grounds.

2. Analysis:

Take a photocopy of your survey plan and on it note your other observations about the qualities of the site and its limitations. It will help you later on when it comes to prioritising the things you want to do with the grounds.



Here are some of the things you should be looking for:

- unsightly areas
- good views
- sheltered places
- exposed areas
- overcrowded playgrounds
- under-used spaces
- sunny, hot areas
- shady areas
- noisy roads on the perimeter
- broken fencing
- evidence of wildlife
- vegetation types

Start surveying people's opinions about the grounds; pupils can also be involved by giving them questionnaires to fill in. Here is a sample list of the sort of questions to ask:

1. Where is your favourite place in the school grounds?
2. Where is your least favourite place?
3. Where is the best view in the school grounds?
4. Where is the worst view in the school grounds?
5. Where do you go outside if it is hot and sunny?
6. Where do you go outside if it is cold and windy?
7. Where do you sit when you are outside?
8. Where do you play and run around?
9. Are there any special places in the school grounds?

3. Needs and wants:



Having now completed the survey and analysis it is time to find out from the school community exactly what uses they would want to make of the grounds, what they would like to keep and what they would like to change.

Remember to plan the **whole** of your school grounds involving the whole of your school community, both for the present and the future.

Pupil Power - Let your students know **they** have the opportunity to change their surroundings.

Begin with a short 'brainstorming' session with small groups of pupils. Avoid commenting on any ideas, just keep them flowing. Prompt their ideas by asking questions like:

- Do you like being outside in your breaktimes?
- What things do you like doing outside in the school grounds?
- What do you not like about your school grounds?
- What things would you like to be able to do outside?
- What do you like doing outside after school and at weekends?

Group together any common elements. You can then discuss these with the groups and write up a list which they feel represents their thoughts and ideas.

Consult user groups e.g. pupils, teachers, other staff, parents, neighbours, governors about what they want to see in the grounds. Ask them to produce "wish-lists".

Consider other needs e.g. curricular, aesthetic, extra curricular, pupil's behaviour patterns.

Let your imaginations run away with you, you'll have a hard job keeping up with the pupil's ideas anyway! To help you we've listed a few here:



Feature	Activity
Activity areas	Adventure playgrounds, playground markings.
Art	Get a local artist in to do some environmental art with the kids; sculpture, mosaic, willow weaving or performance. It won't cost much and everyone will enjoy themselves.
Bird feeder	Not all birds will come to a table, cater for those which don't by hanging up a bird feeder full of nuts and seeds.
Bird gardens	The best way to feed the birds is to provide them with the plants they naturally feed on.
Bird tables	Children and young people love the study of birds, encourage them to come within viewing range and help them through the lean winter months
Bird watching hides	If you can't get 'em to come and see you go out to see them instead, but don't let 'em see you!
Board games	Giant chess etc. Have you seen our GameBoard Picnic Tables?
Boggy areas	Convert those areas that always seem to be wet into a bog garden by hollowing it out a little and introducing native marginal plants.
Butterflies and bees	Give them the plants they like to feed and breed on and they'll reward you with ample opportunities to teach about them.
Compost heaps	Recycle that organic waste.
Container gardens	Brighten up a dull corner by putting some flower filled containers there.
Entrance	It doesn't have to be grand but it is the first thing a visitor sees. What sort of a first impression do you want your school entrance to give?
Hedges	Trees too tall? Plant a hedge instead.
Imaginative features	Design your own seating or build a monstrous lizard out of old car tyres as a play feature.
Levels	Flat, uninteresting grounds can have mounds. Sloping sites might be used to hollow out an amphitheatre.
Log castle	There are thousands of structures to build and ways of using logs in your grounds
Mazes	Make a maze out of balancing beams only a few inches high, plant a hedge maze, make one from wattle hurdles or paint one on the playground.
Mini woodland	Can you extend an adjoining woodland into your grounds or do you have enough room to plant a new wood? You'll probably get an extra grant for it.
Murals	Some are purely decorative, some tell a story, some function as games.

Nesting boxes	Blue Tits and Owls and even Bats can be provided for.
Orchard and vegetable garden	Just where does the fruit and veg in a polythene bag in the supermarket come from?
Pathways	Nature walks, access to new areas etc.
Pergola	Provide shade, a place to sit and a structure to hang wind chimes, bird feeders etc.
Picnic area	For daily use in summer & for special occasions like fund-raising barbecues.
Play house	A good opportunity for imaginative play.
Play structures	Utilise recycled materials or buy them new, build something they can climb on, swing from or balance on but remember safety comes first.
Pond	Pond dipping, calculating area / volume, observation etc.
Raised planters	Give instant height, form a barrier, make gardening accessible to wheelchair users.
Sand pit	Bring the beach to your school for a variety of activities but try to provide a cover for it.
Screen planting	Hide those unsightly views by planting trees.
Seating	Put it in the right place at the right scale and your pupils will love you for it.
Shelter-belts	Stop the wind whistling through the schoolyard by planting a hedge or a shelter-belt of trees.
Sign Posts	Which way do your visitors go to find reception and just which way is North anyway?
Teaching spaces	Make full use of your grounds as an outdoor classroom by having formal or informal spaces created with seats or mounding.
Theme gardens	Stimulate the senses with scented gardens, colour gardens, tactile and even sound gardens.
Tyres	What a wonderful resource old tyres can be & they're free!
Welcome area	Do the pupils' parents have a pleasant place to wait for them to come out of school?
Wildflower meadow	Look around your grounds for an odd shaped area of grass or the corners outside the football pitch and plant them up with wildflowers. They only need mowing once or twice a year so you might save a little money. Poor soil is often best.

4. Planning changes:

Any changes to the school grounds need to be thoroughly planned, a good way of planning is to start by writing a **brief** for the project. This should be a concise document which begins to assign priorities to the tasks.

Think about the likely outcomes of the proposed changes e.g:

Action: Provide more play facilities and seating areas in playground.

Outcome: Improved behaviour of pupils during break times.

Action: Plant a shelter-belt of trees around part of the perimeter of the site.

Outcome: Reduce wind exposure, provide wildlife habitat, screen off unsightly views.

Action: Develop a wildlife area and outdoor teaching space.

Outcome: Provide a focal point for links to the curriculum.



Action: Construct raised planters for adoption by each class.

Outcome: Enhance the appearance of the grounds and encourage a sense of responsibility for the environment and ownership of the grounds.

5. Getting it down on paper:

You are now ready to start the design process and you should think about enlisting the help of a qualified Landscape Architect or designer you haven't already. Your education authority may be able to recommend someone to you; alternatively you can contact Learning through Landscapes who will have a list of service providers in your area or you may be lucky enough to have someone among the school community who is qualified to do the job.

If you don't feel ready at this stage to employ a professional you can begin the design process yourself by producing a **zoning diagram**. This is a rough plan on which you decide which areas are best suited to the various activities and features you want and how they will all link together and function as a whole.

Things to bear in mind are:

- Which activities require the most or least space
- Which activities can be put together
- Which activities should be kept separate
- Where to locate screening, space division and seating

Next, you or your Landscape Architect will need to prepare a **Draft Development plan** for the whole school grounds. This will begin to integrate the ideas you had in your zoning diagram with the information you have recorded on your survey and analysis maps. You must bear in mind that to be as cost efficient and attractive as possible your ideas must work **with** the landscape not **against** it, so try to fit everything in as naturally and as sensitively as you can.

You might like to involve the pupils by making a model of the school and its grounds. Then make scale models of the types of things you have decided you would like to put in, move them around

the model and discuss which might be the best location for each.

Pupils can also be involved in this phase by drawing their own plans and views.

You should now calculate some rough costings so that you have an idea of how much funding might be needed and how feasible your ideas are. Consider the implications of your ideas in terms of how much extra maintenance, if any, will be necessary e.g. labour, energy costs etc.

6. Publicise and consult:

You need to get feedback on your proposals; display your rough Development plan and pupil's work and organise some way of getting feedback e.g. voting on best proposals, suggestion boxes etc.

Include parents and other interested parties in the consultation/feedback process.

Encourage "ownership" of the scheme throughout the school community.

Start thinking about fund-raising methods and get suggestions from school community.



Take into consideration the critical feedback you have had and try to work the ideas back into your plans.

It is important to produce a presentable and comprehensible **Landscape Development Plan** to demonstrate that you have considered the best location for each element and how everything will link/work together.

7. Make the plan work for you

The plan will show how you intend to develop a phased implementation of your scheme so that you can spread the costs and target priority elements of your proposals.

It should be accompanied by detailed costings, at least for the first phase of the proposals. If these seem too expensive you can try to trim them down a little, once you know exactly what you need, you can ring around and perhaps persuade local suppliers to help.

Go on to produce detailed drawings of specific areas and structures for the first phase of your scheme e.g. paving, walls, pergolas etc. You may need these drawings to help you get the various permissions required before you can start. The drawings will help you with your costings and help solve how to fit everything together.

The plan should be incorporated into your overall school development plan.

It will be of great use to you in attracting funding for your scheme.

Display it in the school to inspire interest and enthusiasm and can be incorporated into a publicity pack to send to local businesses and newspapers to attract sponsorship and media interest. It

shows people that you are serious about your intentions and is worth investing some time and money in.

Plan how your grounds development will tie in to curriculum developments.

Revise your school maintenance plan and budget in the light of the proposed changes.

8. Fund-raising

Fund-raising is vital to the transformation of your grounds. Financial assistance may be available from your local council, up-to-date details should be checked as this is likely to change from year year.

The four main sources of funding for improvements to school grounds are:

The school budget.

There is rarely any room in the school budget for an extra charge on resources but you will be adding a considerable asset to your school when you implement your scheme and this should be funded in some part by a regular contribution from the budget.

Grants and awards.

There is a list of grant and award schemes included with this handbook.

These are an excellent source of funding and should be investigated thoroughly as schools in different locations and circumstances could qualify for different grants and awards.

The nature of the features you are planning could also have a bearing on which particular grants you might be able to apply for.

Sponsorship.

Talk to neighbouring landowners to see whether they are prepared to contribute anything, this will be easier if you have involved them in the process from an early stage especially if they have something to gain from the implementation of your scheme such as screening of their property from noise or visual intrusion from the school.

Local garden centres and builders' merchants are often willing to be associated with school projects and can be a good source of materials, expertise and labour.

Having a good Development plan and putting together a brochure outlining your plans and your achievements to-date to send to potential sponsors will be a distinct advantage to you as they will communicate your ideas clearly, and show that they are well thought out.

Fund-raising events.

Most schools are expert fund raisers in any case but here are a few ideas just in case:

Take advantage of landscape related national events such as:

National Tree Week

Details available from the Tree Council on 0171 828 9928. (See useful contacts section).

School Grounds Day

Details available from Learning through Landscapes on 0196 284 6258. (See useful contacts section).

Organise your own landscape related events such as:

- treasure hunts willow weaving
- barbecues drama performances
- garden parties fun run
- sports days summer fete



9. Getting it on the ground

Once you have finalised your plans and detailed drawings for phase one and have managed to raise sufficient funds you have to start organising the **implementation** of the scheme.

Do you have any parents with skills in the building or landscape trades or professions who could help with the planning and supervision of the construction? Can one of your sponsors or a voluntary organisation help out?

If the answer is '**No**' to the above questions you can follow these steps:

- Divide the work up into logical segments and draw up an **action plan**.
- Organise expert labour and volunteer labour. To supplement parent and teacher volunteers there is a list of possible sources of volunteer labour included with this handbook.
- Decide whether you will need to hire any machinery or tools and phone around for the best deals. Using machinery may seem like an unnecessary expense but it can take a surprising long time to move earth without it. It can be de-motivating too and you don't want to lose your help at an early stage.
- Order materials to arrive at the right time, consider access for lorries to your site and decide exactly where you want them unloaded (bear in mind that you don't want to have to shift the

materials again).

- Get stuck in! Work systematically and make sure that everyone knows when to turn up and what to do when they have.
- Your pupils will love participating too; decide in advance what they can safely be allowed to participate in and include them in your plans.

Keep a **diary** and a **photographic record** of your progress for display in the school and maybe for inclusion in the brochures you send out with sponsorship requests.

At the end of phase one you'll probably have had some ideas about how to go about phase two or you may have decided to alter the phasing so it wouldn't hurt to sit back and reappraise your plans.

10. Keeping it going

The project will hopefully gain its own momentum but it helps to keep interest alive and participation active by:

- Keeping the environment committee going on a regular basis.
- Forming an environment club for pupils, parents and staff to start participating in.
- Keeping people informed of progress and reporting back to your sponsors so that they are aware that their money is being put to good use.
- Publicising the next phase of your scheme well in advance.

The improvements will probably take a long time but by setting yourselves achievable goal for each phase, you will be able to look back with a sense of satisfaction. The way in which you are able to enrich the lives of your pupils by following this process will bring its own rewards.

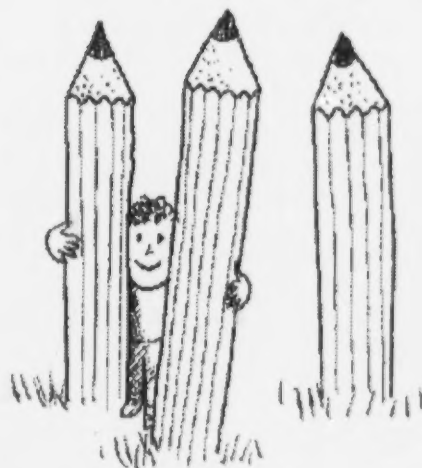
11. Maintenance

Whatever you decide to design for your grounds you should always bear in mind its implications on the school's maintenance budget.

Many new elements in your grounds can be self sustaining in that their maintenance can become part of their educational value e.g. the annual clearing out of a pond or the planting weeding and care of planters each looked after by a school class.

Devising maintenance plans:

- State the overall aims for the site
- Define what each area will look like
- Say how this is going to be achieved
- Say who is going to carry out the work
- Define your maintenance tasks over a period of time



Keep it simple but precise, make sure it will be easy to update and define the level of maintenance required i.e. Tasks, techniques and timing

Stick to standard mowing regimes if possible it will be cheaper and by designing out areas of grass which require hand mowing and introducing wildflower meadows in areas which do not require the same mowing regime as the football field you might eventually be able to trim a little off your maintenance budget.

12. Sustainability

Encourage everyone to take a wider view of the environment and to take responsibility for their role in polluting or preserving it. All schools should have sustainability as a fundamental consideration in the running of the school and the development of the grounds. In order to help you check the sustainability of your ideas we have reproduced on the next page a checklist developed by the Shell Better Britain Campaign (see useful contacts section).

The big advantage of trying out this checklist on your project is that it is simple to use and gives a fairly instant picture of the sustainability issues affecting your project.

Not only does it help you to consider the broader links that may otherwise get overlooked, it gives you an opportunity to put things right wherever practical to do so.

Remember, not all categories in the checklist will apply equally to every project and some categories may not apply at all. Although open to interpretation, the checklist does help you think through the environmental and other impacts of your project, at every stage.

Finally, if you are concerned that this exercise might show up your project unfavourably, you may be reassured by the fact that the issues involved are new to many groups. So, if it helps to develop your thinking, this can only be of benefit to your project.

SUSTAINABILITY CHECKLIST

DOES YOUR PROJECT HELP THE FOLLOWING AREAS		Yes	No	No effect
1 COMMUNITY PARTICIPATION				
a) encourage local action and decision-making				
b) involve your community in developing the proposal				
c) take into account under-represented groups				
2 ECONOMY & WORK				
a) link local production with local consumption				
b) increase employment/vocational training opportunities				
c) improve environmental awareness of local businesses				
3 TRANSPORT				
a) encourage walking or cycling				
b) encourage use of public transport				
c) discourage use of cars/lorries				
4 POLLUTION				
a) reduce local pollution, e.g. noise, air, water, land etc.				
5 ENERGY				
a) maximise energy efficiency				
b) generate energy from renewable resources or waste				
6 WASTE & RESOURCES				
a) reduce waste				
b) encourage reuse and/or repair				
c) encourage recycling or use recycled products				
7 BUILDINGS & LAND USE				
a) provide local amenities				
b) improve access for disabled				
c) reuse/conservate building(s)				
8 WILDLIFE & OPEN SPACES				
a) encourage use of open space for community benefit				
b) encourage natural plant and animal life				

In the checklist:

YES shows a positive benefit, ideally as a result of advance planning.

NO shows a negative effect, the cause of which may have been overlooked, and provides an

opportunity to reduce the environmental impact.

NO EFFECT shows either no change as a result of the project or that the category doesn't apply.

Secondary schools in particular might wish to take their school grounds development project a stage further by linking it with or starting up a Local Agenda 21 project such as reduction in the school's energy consumption and waste production, transport sharing or the production of a parish map to help generate a greater sense of understanding of the local community.

Local community groups could be invited to participate or to contribute ideas which would help the community make greater use of the school grounds.

Local Agenda 21 is a process that aims to integrate the social, environmental and economic aspects of development in order that all future development is 'sustainable'. It requires all of us to consider the effects - on the local economy, the local environment and the local community - of every policy and project and then to seek a solution that achieves a realistic balance. It originates from the United Nations Earth Summit held in Rio in 1992 which led to the agreement of an Agenda 21 document detailing a series of strategies for action worldwide.

Appendices

Play - What variety and choice of activities do you have?

Active Play: Adventure play trail, running skipping, ball games

Quiet Play: Giant chess etc. imaginative play, socialising



Think about providing variety to allow choice of activity at breaktimes

Play Equipment - Please contact the Education Health & Safety Adviser at your local council to find out their policy on the installation and use of play equipment e.g:

- Surfacing required beneath apparatus
- Maximum climbing height
- Design advice
- Recommendations for supervision
- Appropriate dress/footwear to be worn
- Maintenance

Manufactured play equipment can be expensive but you have the security of knowing that it has been designed and manufactured to conform with B.S.5696 and/or D.I.N.7926.

The Schoolscapes range of timber play equipment is extremely good value for money - take a look at our [catalogue](#) and see for yourself!

If you want to save money and have the skills and manpower to construct your own play equipment then a useful publication to have is "Self-Build Play Equipment" produced by the National Playing Fields Association (see useful contacts section).

Safety - Here are some "rules of thumb" but you should check local and national regulations and standards before embarking on your project:

Height - In general, no play opportunity should allow a child to fall from a height greater than 2.5m

Any play opportunity allowing a fall from a height of 600mm or greater should be installed on impact absorbing surfacing.

Safety zone - Manufacturers are required to calculate a "minimum use zone" around each piece of equipment they supply. These zones should preferably not be allowed to overlap when the equipment is installed.

Beware of potential hazards such as:

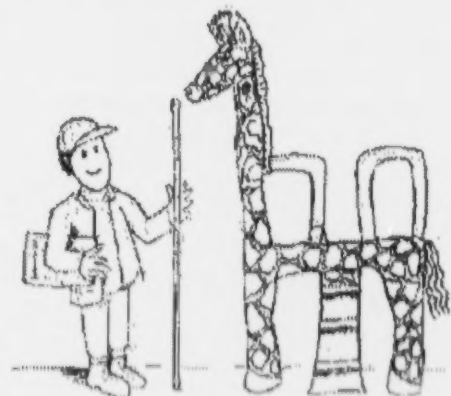
Finger, arm and head traps

Railings and safety barriers

Sharp edges and protrusions

Trip hazards

Overall height of the equipment



Surfacing - Choice of material is dependent upon many factors:

Durability and stability Ease of maintenance

Slip resistance when wet Likelihood of contamination

Slip resistance when dry Method of containment

Drainage Attractiveness

Impact absorption where necessary Cost

You could use:

Woodchip, Bark, Decking, Tarmac, Concrete, Paving slabs, Brick, Gravel, Cobbles, Grass, Astroturf, Rubber play surfaces...

Think about edges, heavy wear, desire lines (shortcuts people will naturally take) and combinations.

Topography (Landform) - What is appropriate in your School Grounds?





Slopes Hedge banks

Mounds & Hollows Ditches

Terracing Banks

Steps Ramps

Think about ground water levels and machinery required.

Water features - What do you want from your water

feature?

Wildlife pond

Ornamental fish pond

Bubble fountains

Wall fountains

Streams



Think about safety, therapeutic effect and ease of maintenance.

Sport - How dominant is sport in the shaping of the grounds?

Football Netball

Basketball Hockey

Rounders Baseball Athletics

Volleyball Tennis

Cricket Cross Country

Think about avoiding dominance of sport on the site, multiuse pitches, and all weather provision.



Animals - What do you want to teach / how will you organise it?

Pet corner

Produce (eggs, cheese)

Maintenance (grazing)Therapeutic effect

Think about your facilities and holiday care, could you offer grazing to other people's animals?

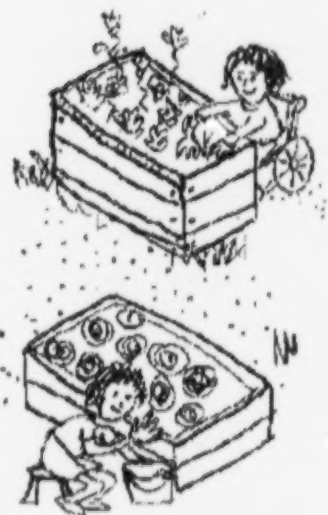
Crops - What do you have space for and what can you make use of?

Wheat for bread, Herbs for dyes

Annuals for dried flowers, Osiers for baskets

Hazel for poles/charcoal, Fruit and Vegetables.

Think about possible revenue potential from marketing and pleasure/learning from cropping and using.



PLANTING



Think about the scale of planting; trees, shrubs, herbaceous plants and bulbs. All planting has soil requirements, what type of soil do you have? What is your reason for planting; animal and bird attraction, scent, fruit, aesthetics?



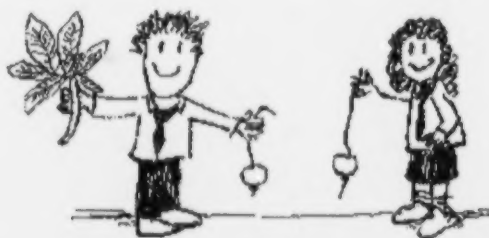
Trees

Careful choice of species is necessary check the tree's eventual size and spacings required and the degree of maintenance needed. The lists below should help you:

native trees for environmental areas



Proper name	Common name	Height	Comments
<i>Acer campestre</i>	Field maple	5-15m	Colours yellow or red in Autumn
<i>Alnus glutinosa</i>	Alder	8-20m	Can tolerate v. wet, Winter cones, catkins in Spring, attracts birds
<i>Betula pendula</i>	Silver birch	6-15m	Fast grow/white bark, casts light shade /sandy soils, attracts birds
<i>Carpinus betulus</i>	Hornbeam	6-25m	Similar to Beech but prefers heavy clay soils
<i>Crataegus monogyna</i>	Hawthorn	4-6m	V. thorny, any situation, white Spring blossom, red fruit Autumn
<i>Fagus sylvatica</i>	Beech	6-37m	Large/graceful tree, smooth grey bark, Beech nuts, free draining soil
<i>Fraxinus excelsior</i>	Ash	8-30m	Large tree with light foliage & graceful shape, heavy soils
<i>Ilex aquifolium</i>	Holly	4-15m	Plants are either male & female so need several to ensure berries
<i>Juglans regia</i>	Walnut	5-25m	Slow growing, large tree which may bear fruit after several years
<i>Malus sylvestris</i>	Crab apple	4-12m	Small tree, small white flowers iSpring/ small green apples (jelly)
<i>Populus tremula</i>	Aspen	8-15m	Thrives in all soils, even wet, foliage rustles, yellow in Autumn. Don't plant close to buildings
<i>Prunus avium</i>	Wild cherry	8-25m	Medium tree, white blossom in Spring, cherries attract birds
<i>Quercus robur</i>	Oak	4-25m	Large, long lived. V. good for wildlife supports over 200 species of invertebrates
<i>Salix alba</i>	White willow	10-25m	Elegant tree, long, silky leaves, fast growing likes wet. Don't plant close to buildings
<i>Salix fragilis</i>	Crack willow	5-14m	Large, spreading, rough bark, catkins in Spring, likes wet. Don't plant close to buildings
<i>Sorbus aria</i>	Whitebeam	5-14m	Smallish tree, compact round head. Oval leaves silver at first turning green, white flowers, red fruits, gold foliage in Autumn
<i>Sorbus aucuparia</i>	Rowan	6-12m	Smallish tree, pinnate leaves, white flowers then orange/red berries. Attracts birds
<i>Sorbus torminalis</i>	Wild service	6-12m	Medium tree, ascending branches, russet brown fruit & Autumn colour
<i>Tilia cordata</i>	Small leaved lime	6-30m	Large tree, heart shaped leaves & green starry flowers



tree species for ornamental areas

Proper name	Common name	Height (metres)	Comments
Aesculus hippocastanum	Horsechestnut	7-25m	Large hand like leaves & candelabra flowers in Summer, conkers make this popular. Prefers rich soils.
Hamamelis mollis	Chinese witch	3-4m	Shrubby tree with fragrant yellow flowers Dec-March. Expensive & slow growing but worth while.
Malus 'Golden Hornet'	Crab apple	5m	Small tree with white flowers then small, long lasting, yellow apples
Malus 'John Downie'	Edible apple	5m	Small tree with white flowers the bright red/orange apples
Prunus subhirtella 'Autumnalis'	Ornamental cherry	7m	Small tree with white blossom Nov-March
Robinia pseudoacacia	False acacia	10-12m	Attractive, fast growing pollution tolerant, likes free draining soils
Sorbus 'Joseph Rock'	Ornamental rowan	9m	Small tree with Autumn colour & yellow fruits



native shrubs for environmental areas

Proper name	Common name	Height	Comments
Buxus sempervirens	Box	3m	Hedging or shrub in shade/ semi-shade, slow growing, evergreen
Cornus sanguinea	Dogwood	2.5m	Greenish, red flushed stems, black fruits. Hard prune in March to keep stem colour
Corylus avellana	Hazel	7m	Mid-green leaves, yellow catkins, good for coppice
Cytisus scoparius	Broom	2.5m	Rich yellow, scented flowers in early Summer / black seed pods

Euonymus europaeus	Spindle	3m	Deciduous shrub with flowers then rose red capsules showing orange seeds
Juniperus communis	Juniper	2.5m	Evergreen/blue/black berries/ cones
Ligustrum vulgaris	Privet	2.5m	Semi-evergreen fast growing shrub tolerant of most soils & shade, shiny black fruits
Prunus spinosa	Blackthorn	5m	Forms impenetrable, thorny thicket, white Spring blossom & sloes
Rosa arvensis	Field rose	0.5m	Trailing spp forms dense mound, white flowers & red rosehips
Rosa canina	Dog rose	4m	Fast growing prickly rose with pinky white flowers & red rosehips
Salix caprea	Grey willow	5m	Soft silky catkins turning yellow as they open
Sambucus nigra	Elder	6m	Fast growing with frothy white flowers then black berries for jelly
Ulex europaeus	Gorse	1-2m	Dense, spiny shrub/yellow flowers then seed pods. Best on poor soils
Viburnum lantana	Wayfaring tree	6m	Large shrub with creamy Spring flowers then red/black fruits
Viburnum opulus	Guelder rose	6m	Flat heads of white flowers then black berries, grows well in damp

shrub species for ornamental areas

Proper name	Common name	Height	Comments
Amelanchier canadensis	Snowy mespilus	3m	Thrives on moist, well drained soils. Long white flower racemes in April, leaves colour in Autumn
Berberis x stenophylla	Barberry	3m	Forms dense, thorny barrier of arching branches in most soils. Golden flowers in April
Cornus alba 'Sibirica'	Red bark dog wood	3m	Suckering, vigorous shrub with red Winter stems, cut back to base every 2nd year
Cotoneaster conspicuus	Cotoneaster	2m	Evergreen/dense arching, white flowers & red berries
Cotoneaster microphyllus	Dwarf Cotoneaster	25cm	Evergreen with wide spreading branches, white flowers, red berries, good groundcover
Genista hispanica	Spanish gorse	1m	Compact form of Gorse with prolific gold flowers
Hebe 'Red Edge'		0.75m	Round evergreen shrub with red edged leaves & purple flowers
Hedera helix & variegata	Common Ivy Variegated Ivy	-	Evergreen groundcover with either dark green leaves or cream/ yellow variegated form
Hypericum calycinum	Rose of Sharon	450mm	Vigorous, dense carpet, bright yellow flowers tolerates most conditions
Lonicera pileata		800mm	Evergreen, dense shrub grows well in shade, attracts wildlife
Mahonia 'Charity'		2m	Strongly formed evergreen with prickly leaves & scented yellow flowers in early Spring, then fruits
Potentilla fruticosa		1.5m	Grows well in free draining soils & sun, prolific flowers in a range of colours depending on cultivar

(& cultivars)

Vinca major Greater periwinkle 300mm Spreading, vigorous evergreen with purple/blue flowers Apr-June

hedge species



Proper name	Common name	Height	Comments
<i>Buxus sempervirens</i>	Box	0.30m-1m	Shade /slow grow evergreen
<i>Crataegus monogyna</i>	Hawthorn	1-5m	Prickly stems, slightly untidy hedge with Spring blossom
<i>Euonymus japonicus</i>		1-2.5m	Dense waxy leaved evergreen has fresh green new growth, not fully hardy
<i>Fagus sylvatica</i>	Beech	2-3m	Retains dead leaves in Winter, attractive tall hedge
<i>Ligustrum ovalifolium</i>	Privet	1.5-2.5m	Fast growing dense hedge but frequent trimming
<i>Lonicera nitida</i>		1m	Evergreen small leaved dense hedge, attractive/frequent trim
<i>Prunus laurocerasus</i>	Laurel	2-4m	Large leaved wide hedge fast growing, scented flowers, needs lots of space
<i>Pyracantha</i> spp		1-2m	Very thorny, dense hedge, attractive with red/yellow berries

herbaceous species

Wildflowers, perennials and annuals are very rewarding as they grow fast and provide a wide range of flower colour and form. Ornamental species will mostly prefer improved soils, however, wildflowers are best grown on poor soils and therefore, choosing the appropriate species for your soil type and area is very important. The following lists are intended as a guide:

Calcareous soils

Wild Basil
 Ladys Bedstraw
 Clustered Bellflower
 Wild Carrot
 Cowslip
 Ox-eye Daisy
 Goats Beard
 Common Knapweed
 Greater Knapweed
 Black Medick
 Hoary Plantain
 Sanfoin
 Small Scabious
 Self Heal
 Birdsfoot Trefoil
 Horseshoe Vetch
 Yarrow

Heavy clay soils

Meadow Buttercup
 White Campion
 Cowslip
 Cats Ear
 Ox-eye Daisy
 Common Knapweed
 Meadow Sweet
 Black Medick
 Ribwort Plantain
 Yellow Rattle
 Ragged Robin
 Self Heal
 Common Sorrel
 Birdsfoot Trefoil
 Kidney Vetch
 Yarrow

Sandy soils

Ladys Bedstraw
 White Campion
 Wild Carrot
 Ox-eye Daisy
 Harebell
 Rough Hawkbit
 Black Medick
 Wild Mignonette
 Yellow Rattle
 Birdsfoot Trefoil
 Lesser Yellow Trefoil
 Kidney Vetch
 Vipers Bugloss
 Weld
 Yarrow

If the area is shaded or wet then this will change the varieties you can grow, contact a wildflower nursery for advice.

Useful contacts (UK)

Name	Address	Description	Contact info
ACTAC	(Association of Community Technical Aid Centres) 64 Mount Pleasant Liverpool L3 5SD	<i>National network of centres, groups and individuals providing professional and technical skills in support of community projects.</i>	Tel. 0151 7087607 Fax. 0151 7087606
BTCV	(British Trust for Conservation Volunteers) 36 St. Mary's Street Wallingford OX10 0EU	<i>Support for community groups carrying out practical conservation work. Tool loan / hire. Conservation training.</i>	Tel. 01491 839766 Fax. 01491 839646

Centre for Accessible Environments	Nutmeg House 60 Gainsford Street London SE1 2NY	<i>Advice on designing environments which are accessible to everyone and administers a register of Architects with experience of designing for disabled people.</i>	Tel. 0171 3578182 Fax. 0171 3578183
Charity Projects	UK Grants Dept 74 New Oxford Street London WC1A 1EF	<i>Grant-making arm of Comic Relief.</i>	Tel 0171 4361122 Fax 0171 4361541
Common Ground	Seven Dials Warehouse 44 Earlham Street London WC2H 9LA	<i>Emphasis on working in association with the arts and promoting local distinctiveness.</i> <i>Projects: Parish Maps, Save our Orchards, Manifesto for Trees.</i>	Tel 0171 3793109 Fax 0171 8365741
Disability Action	2 Annadale Avenue Belfast BT7 3UR	<i>Aims to remove the handicap from disability. Covers employment, training, sport, access, transport and information.</i>	Tel 01232 491011 Fax 01232 491627
Disabled Living Foundation	380 / 384 Harrow Road London W9 2HU	<i>Practical, up-to-date information and advice on all aspects of disability. Training courses and publications.</i>	Tel 0171 2896111 Fax 0171 2662922
Forestry Commission	231 Corstorphine Road Edinburgh EH12 7AT	<i>Administers the Woodland Grant Scheme for planting, restocking and managing new and existing woodlands (even very small ones).</i>	Tel 0131 3340303 ext 2322 Fax 0131 3344473
Horticultural Therapy	Goulds Grounds Vallis Way Frome Somerset BA11 3DW	<i>National charity promoting the enjoyment and benefits of gardening - particularly for people with disabilities.</i> <i>Publications: magazines, leaflets, books. Tape magazine and advice line for visually impaired gardeners.</i>	Tel 01373 464782
Learning through Landscapes	3rd Floor, South Side The Law Courts Winchester SO23 9DL	<i>Pioneers in the field of encouraging schools to improve their grounds and community involvement. An excellent range of practical publications and videos. Membership and grant schemes.</i>	Tel 01962 846258 Fax 01962 869099

National Federation of City Farms	The GreenHouse Hereford Street Bedminster Bristol BS3 4NA	<i>Promotes and supports sustainable regeneration through community managed farming and gardening.</i> <i>Publications: Newsletters and technical information sheets.</i>	Tel 0117 9231800 Fax 0117 9231900
National Play Information Centre	359 - 361 Euston Road London NW1 3AL	<i>Provide information, advice and publications on all aspects of children's play and related issues including legislation, safety, design of playgrounds and play work.</i> <i>Publications: Information sheets including one on Grants for Children's Play (free). Reference library service.</i>	Tel 0171 3835455 Fax 0171 3873152
NPFA	National Playing Fields Association 25 Ovington Square London SW3 1LQ	<i>Provides technical advice on policy, standards and practical initiatives to save and create outdoor recreational facilities.</i>	Tel 0171 5846445 Fax 0171 5812402
Permaculture Association	PO Box 1 Buckfastleigh Devon TQ11 0LH	<i>Advice on the principles and practices of Permaculture, local contacts and links to local Permaculture schemes, training, publications, videos for rent, advice on setting up new schemes.</i>	Tel 01892 825049
RIBA	Royal Institute of British Architects Community Architecture Resource Centre 66 Portland Place London W1N 4AD	<i>CARC administers the RIBA/BT Community Projects Fund which gives grants for feasibility studies including the cost of professional fees.</i>	Tel 0171 5805533 Fax 0171 2551541
RNIB	Royal National Institute for the Blind 224 Great Portland Street London W1M 6AA	<i>Run a scheme called The Sensory to encourage the provision of facilities to enable everyone to actively participate in the environment.</i>	Tel 0171 3881266 Fax 0171 3882034

Schoolscapes	Schoolscapes 11a Wrecclesham Road Farnham Surrey GU9 8TY	<i>Professional school grounds development plans.</i> <i>Playground equipment, seating, shade structures.</i> <i>Free advisory service and grant funding advice.</i>	Tel. 01252 734894 Fax 01252 728007 e.mail: school.scapes@virgin.net website: http://freespace.virgin.net/school.scapes/
Tree Council	51 Catherine Place London SW1E 6DY	<i>Organises National Tree Week annually. Promotes the planting and proper care of trees in urban and rural settings.</i> <i>Grants available.</i>	Tel 0171 8289928 Fax 0171 8289060

Bibliography



Adams E. A report on the Use, Design, Management and development of School Grounds. Learning through Landscapes

Bains C. (1985) How to make a Wildlife Garden. Elm Tree Books

Booth P.R. (1990) Ecology in the National Curriculum - A Practical Guide To Using School Grounds. Learning Through Landscapes

- British Trust for Conservation Volunteers. (1984) DIY Conservation Pack. Wembley Press, Reading.
- Cornell B. (1979) Sharing Nature With Children - A Parents and Teachers Handbook. Exley Publications.
- Department of Education and Science. (1990) Building Bulletin No. 71 The Outdoor Classroom. (London HMSO)
- Directory of Social Change. (1978) Campaigning and Lobbying.
- Elstgeest J. and Harlen W. (1990). Environmental Science in the Primary Curriculum. Paul Chapman Publishing Ltd.
- Emery M. (1986) Promoting Nature in Cities and Towns - A Practical Guide. Groom Helm on behalf of the Ecological Parks Trust
- English Nature. (1991). School Nature Area Action File. Nature Conservancy Council, Peterborough
- Flatt G. (1989) Pond Design Guide for Schools. Hampshire Books on behalf of Hampshire County Planning Department
- Nature Conservancy Council. (1988) Conservation Matters Number 2. Nature Areas and the Primary School Curriculum
- Nature Conservancy Council. (1988) Conservation Education Matters
- Skinner E. (ed). Directory of Grant Making Trusts. Charities Aid Foundation
- Titman W. (1994) Special Places, Special People. The Hidden Curriculum of School Grounds
- Wood J. and Littlewood M. (1996) A Guide to the Management & Maintenance of School Grounds. Learning Through Landscapes